Advanced Management

APRIL 1961

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SOCIETY FOR ADVANCEMENT OF MANAGEMENT S·A·M

How to Look at People

A Code for Industrial Purchasing

APRIL, 1961
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Advanced Management

Progress Through Enlightened Management

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Readers of ADVANCED MANAGEMENT have noted the changes in content and format that we have been making during the past year, and most of you have been kind enough to approve. These changes have aimed toward two major objectives: a) to make the magazine easier to read without sacrificing the high quality of editorial content that is traditional in ADVANCED MANAGEMENT b) to restore or develop continuing features such as book reviews and chapter news that had been discontinued at an earlier date and were missed by our readers, some, such as the "In-Basket" column, to deal briefly with a variety of material that we believe is of interest to our readers. There has been the innovation of an occasional issue devoted largely or entirely to a specific problem of interest to management such as mental health, international developments, and management problems in small business. Such issues we plan to offer not more than three or four times a year, since our main task is to keep our readers informed of the latest developments on all the major frontiers of management thinking and philosophy.

With the April issue you may note some changes in the masthead. For the past nine months we have been indebted to Dause Bibby, our chairman of the board, and president of Remington Rand, for the loan of part of the time of Dr. Henry Singer. His creative thinking, imagination, and energy have been major factors in the innovations described above. It is not astonishing that the company which pays his salary now feels the need of more of his time. However, we are glad that Dr. Singer will be able to sit with us occasionally to explore the future of the magazine.

With the Advanced Management Course well on its way, our director of education and research, C. West Hodges, takes over an added duty as managing editor of the magazine. He is assisted in this function by a new member of our staff, Robert H. Stice, jr., who has extensive professional background in the magazine and newspaper field. Another able member of the staff is our editorial secretary, Mrs. Judith Mende, formerly personal secretary to the public relations director of a well-known cultural foundation in N.Y.C.

We look forward to the continued improvement and development of ADVANCED MANAGEMENT, which has long occupied a high position in its field. You, as readers, can help us by keeping us posted on how well you think it is accomplishing its function — and how it can do better.

W. M., jr.

Innovation
—Dynamic,
Purposeful,
Significant

A
M

Editorial

Impact of E Data P on Managers

Managers' Knowledgeable Action Key to Proper Application of EDP Hardware – Often Requiring Cogent Re-organization, Expanding Idea Flexibility

IF YOU ARE A MEMBER of business management, your professional life almost certainly will be affected profoundly by the evolution of electronic data processing (EDP) in business and industry. Potentially, EDP can change your company's organization for management, your own methods of managing, and what is required of you as a manager.

The effect of EDP on management organization becomes obvious early in a firm's basic planning preparatory to conversion to EDP methods.

As if by rote, too many firms continue to follow present procedures rather than explore the *total business concept*. Without accomplishing basic organizational change, they hope to save money by doing things as they always have been done, only faster. They have successfully used the *capacity* of the computer to *maintain* records efficiently. The next step is to use the computer's full power to help *control* the business.

Computers have the capacity and capability to become a central point of control for all operations of a business. Management must think in terms of *all* the functions of its business when laying out an EDP system, if it is to realize this full potential. Effectiveness is diluted when only a few selected functions are integrated into the EDP system and departmental barriers to communication remain intact.

Wherever possible, management should combine all operating systems into a single functional organization, crossing existing departmental lines of authority with regard only to total efficiency.

Organizational Centralization vs. Decentralization

This idea of integrating all operating systems with a central (computer) point of control adds fuel to the continuing controversy on the issue of centralization versus decentralization in business organization. Some of the more sophisticated writers on this subject conclude that EDP—which they call "information technology"—will lead to an irrevocable trend toward centralization. They believe the greatest impact will fall upon middle and top management. In their view, management will be able to do what it always has wished to do: control from a central point, with computers performing routine decision-making and top management confining itself to broad policy thinking and establishment of objectives.

This view seems extreme. It probably would be more

Electronic Processing

by Peter W. Melitz

Peter W. Melitz joined IBM, Seattle, in 1950 and has served as sales representative, 1951-'54; electronic data processing special representative, 1954-'56; data processing manager, Rochester, N. Y., 1956-'58. He is currently district manager of IBM's Dallas Data Processing Div. Degree: B.A., Economics—University of Washington.

accurate to say that EDP gives business and industry the means to support decentralized local management with better facts for *local* decision-making as developed by *central* computer accumulation of information. *At the same time, a computer will centrally accumulate business intelligence from the whole of a business for better broad policy making at top management levels.*

Other future organizational impacts will include:

General acceptance of data processing management people as senior administrative executives. This is on the way! It now is axiomatic that EDP managers report directly to major executives. The need is to resolve conflicts over priorities and to cross firmly interdepartmental lines of management in keeping with the *total system* concept. Computers become service centers serving all management. The men who run them must have management status to be effective.

There will be a tremendous upgrading of systems and methods personnel. Managers must learn to deal with technically-oriented individuals who have moved out of the laboratory. This differs from managing the typical accountant, clerk, or other non-scientific employee.

Impact on Managing

To date, the greatest payout of computer use has been in the scientific area, largely because scientific uses have primarily been profit-making applications. In commercial data processing, as well, more emphasis on profit-making applications will lead to greater computer profitability. Managers must now learn to look on the computer as a *profit-making* tool.

Already commercial and scientific applications are tending to merge. Business will hear much more of such terms as *operations research* and *mathematics and management* as the universal language of mathematics becomes increasingly a language of business. This greater intrusion of mathematical and scientific techniques upon business decision-making likely will cause one of the most significant impacts on the profession of managing. *Decisions which have been largely intuitive in the past can be more factual now.*

Mathematical methods will minimize trial and error by pre-testing business decisions and developing alternate choices. Some of these techniques, on their way to becoming standard management practice, include:

• *Simulation,* making it possible to build a mathematical model of a portion of a business; *i.e.,* an inventory or a job shop.

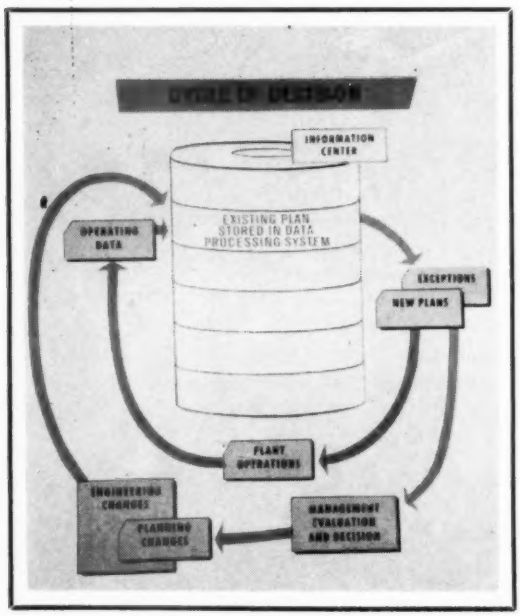
• *Forecasting,* using historical data and current trends to predict end results.

• *Linear Programming,* mathematically developing optimum solutions to minimize transportation and production costs.

• *Least Cost Estimating and Scheduling,* creating an optimum schedule of operations to complete a given task, such as overhauling a refinery, in the minimum amount of time or at the minimum cost.

Need for Management Decisions Still Extant

Note that these are only techniques. They are used by management to pre-test decisions; they do not replace the need for management decisions. The alternates must be selected ultimately on the basis of management judgment.



With EDP, management can also expect better *implementation* of decisions. EDP can implement routine policy decisions automatically without misinterpretation by people. For instance, automatic stock replenishment can bypass stock clerks. Moreover, EDP can quickly evaluate the effect of a decision on the whole of the business and accelerate communications to effect changes faster and with greater control even when human action is required.

With this effectiveness and efficiency in managing come certain restrictions. Computers require a high degree of procedure formalization. A random policy change can result in the disruption of the system. Before procedures can be formalized, managers must be sure they have a completely factual and intimate knowledge of their business, particularly in the areas of cost, marketing, and production. Unless sufficient facts are available to make mathematical interpolations, the computer's usefulness is affected.

The business of managing will be further affected by growing use of *management by exception* techniques. Computers will digest detail, analyze according to management standards of reasonableness, and report only exceptions for follow-up action. This is one of the most powerful benefits of computer logic. It eliminates much of the detail and gives managers time for creativity.

Impact on Qualities Required of Managers

Full effectiveness of EDP as a tool for managing requires managers who have courage and conviction to alter traditional methods and policies when the need dictates. They must be willing to modify existing organizational responsibility in keeping with "What is right?," not "Who is right?" They must be able to resolve interdepartmental differences, recognizing that data is the common denominator. And they must be able to recognize the service aspects of accounting data, suppressing the urge to over-report.

This flexibility and adjustment in thinking, methods, and techniques require continuing education in a field where there are few up-to-date text-books. Managers must be ever inquisitive, keeping themselves abreast of current developments.

However, technical background is not likely to become a prerequisite for managers in the computer era. Managers must understand mathematical concepts, but need no particular skill in their application. If anything, there will be need for an even greater breadth in the general background of top executives because they will be dealing primarily with long-term policies and broad objectives. Intelligence remains a basic prerequisite.

Summary

Profitable utilization of a computer as a powerful management tool depends upon *management action,* not EDP hardware. The evolution of EDP thus amounts to an evolution within business management, one which seems certain to result in changes in the following most basic elements of management:

1) *Organization.* EDP lives up to its full potential only when properly applied to the problems of a particular business structure. This often requires basic reorganization, consolidating responsibilities and functions. This represents an early area of management impact, even preceding EDP equipment installation.

2) *Managing.* EDP helps managements do a better job of managing. Basic responsibilities remain the same, but methods often change. Decisions are made on the basis of more, better, and more-current information. Managers can occupy themselves less with detail, more with broader, long-range objectives.

3) *Manager Qualifications.* In an era of fast-developing and significant change in the science of management, managers must become increasingly flexible if they are to see and use the potential in new ideas. They must arm themselves with knowledge and forcefully lead the evolution to greater profitability.

● **Many companies still employ industrial engineers primarily as time-study experts, fail to realize potential impact of industrial engineer on total management area; transition of industrial engineer from frequently-berated 'efficiency expert' to scientifically-oriented analyst steadily crystallizing**

Dynamic Industrial Engineering

by Albert G. Holzman

Presently professor of industrial engineering at the University of Pittsburgh, Albert G. Holzman has also served as industrial analyst, Bethlehem Steel, and has been associated with Mine Safety Appliances Co., Westinghouse Electric Corp., U.S. Steel, U.S. Government on special assignments. Degrees: B.S. in industrial engineering, 1949; M.S., 1954; Ph.D., 1958—University of Pittsburgh.

INDUSTRIAL ENGINEERING is a relatively new engineering field, but is already considered as a scientific profession which requires the same knowledge of the fundamental and engineering sciences as do other engineering fields.

The *Journal of the American Institute of Industrial Engineering* defines industrial engineering as being "concerned with the design, improvement, and installation of integrated systems of men, material and equipment; drawing upon specialized knowledge and skill in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design, to specify, predict, and evaluate the results to be obtained from such systems".*

The broad and searching character of industrial engineering is obvious from the above definition. Industrial engineering is directed towards the modern scientific concepts which have emerged during the past decade as opposed to traditional, trial-and-error methods frequently utilized in the solution of complex managerial problems. The industrial engineer must now have the same facility in mathematics and research methodology as do scientists and other engineers. In addition, he is confronted with perplexing human engineering problems, since very often he is concerned with people directly or indirectly in formulating management decisions.

A University Program

This approach can be inferred from the objectives established by the Industrial Engineering department at the University of Pittsburgh.

To develop and advance the science of industrial engineering the objectives are:

1) To impart knowledge of existing developments, methodology, and practices, 2) to stimulate interest in the need for further scientific investigation, and 3) to conduct research in areas concerned with the integration of men, materials, and equipment.

Fundamentals are stressed in the undergraduate program. While the scope is relatively broad, nevertheless depth in understanding the fundamentals is considered essential. To specialize would necessarily require concentration on a relatively narrow spectrum of knowledge; therefore, selective specialization is postponed to the graduate program.

Certainly, the industrial engineer not only must have confidence in himself, but must be able to generate the utmost respect from others in the management climatology. Creativity of thought and ability to abstract are qualities which should be inherent in the industrial engineer. He must possess analytical ability and initiative, yet be diplomatic and tactful in his contacts with other engineers, managers, and scientists. To produce these attributes, the educational program for an industrial engineer must skillfully blend the basic sciences with a study of management problems. This implies that the student gains a knowledge of the *modus operandi* of both the physical and social sciences.

Opportunity for Growth

The industrial engineer has a broad, challenging field in which to develop. The industrial engineering activity itself

*Currently quoted monthly on back cover of JAIIE.

in a company offers many situations in which the industrial engineer can sharpen his ability to discern and to evaluate, his responsiveness to changing conditions, and his reasoning ability in the analysis of such activities as production planning, manufacturing engineering, redesign of existing facilities, design of new plant facilities, methods engineering, control of production and quality, inventory control, and organization structure. The trend is in the design of the entire system and the interaction of the components within the system. The problem of integrating new

developments and more effective procedures is of paramount importance today.

At present, as in the past, many industrial engineers are employed as management trainees. Industry recognizes the need for a strong technical background for its managers, and the industrial engineer is in an enviable position from which to be promoted to supervisory and managerial positions. The industrial engineering function by its own nature exposes the industrial engineer to the control centers of management. In today's free enterprise system, superior management is accepted as one of the most critical competitive factors required to direct organizations which are as complex and dynamic as today's modern equipment. Many management aspirants will find these activities just as challenging and stimulating as the more physical problems.

But the industrial engineer is not limited to management positions. Some are now entering such stimulating areas as applied statistics, data processing and computer applications, operations research, automation, and systems analysis. These functions may be included in the industrial engineering activity of a company, or may be considered as separate functions, depending on the size and the organization structure of a company. Even at the undergraduate level, emphasis is being placed on more analytical methods in the analysis of management problems.

Today it is more apparent than ever that a student needs a liberal education mortised into his professional program. For society to receive the maximum benefits from university graduates, this integration is a requisite. The following division of study in the industrial engineering undergraduate curriculum at the University of Pittsburgh not only reflects a strong emphasis on the basic sciences as well as engineering science and analysis, but also a recognition of the need for knowledge in the behavioral sciences.

Division of Study	*Credits*
Mathematics	19
Physics	12
Chemistry	8
Engineering Science	33
Engineering Analysis, Design, and Systems	18
Humanistic-Social	23
Accounting	7
Other technical	15
Other non-technical courses	11
Total	146

Conclusion

The industrial engineer has now tossed off the shroud of the "efficiency expert". He is no longer strait-jacketed in the cloak of the time-study man; he has emerged from his incubation period into a dynamic management scientist. It is important that the potential impact of the industrial engineer on the macroscopic management system be recognized by plant management in their constant search for analysts to make forays in these complex managerial problems.

A System for Reports Management

by John B. McMaster

OBVIOUSLY, reports are a vital tool for conveying necessary information to those who must make decisions based on facts. As such, reports cannot be entirely dispensed with without causing damage to the proper direction and control of an organization, regardless of type. The fact remains, however, that poorly conceived and unnecessary reporting requirements—even those that are necessary—too often do cause a good deal of anxiety and frustration to staffs who may be already overworked. In addition, such reports add considerably and unnecessarily to the overhead of an operation.

Reports, most will concede, are a two-sided coin. They can and do serve an invaluable management function when well conceived. As such, they contribute to timely and proper decisions and to coordination of overall organizational effort. The results are efficient and effective operations which add up to money on the credit side of the ledger.

The obverse side of the coin, on the other hand, reflects those reporting requirements which confuse and perplex not only the ones required to prepare them, but those who receive and must interpret them. These are the reports which serve no useful purpose and consume the time of those involved. In short, they add considerable red ink to the ledger.

How can the job be handled so as to insure continuation and even initiation of worthwhile reports and at the same time to reduce or eliminate the traffic of asinine reports whose main purpose is to build office empires?

An Emergency Measure

Like anything worth doing, there are different ways of approaching the problem of reports control. A few top managements who have been economy conscious in regard to reports, have gone so far as to decree the immediate stopping of reports until such time as they can be justified. This certainly is one way of reducing the volume of reports and it is difficult to frown on such a measure provided those who require certain information have ample opportunity to justify retention of reports prior to their discontinuance. To do otherwise could cut off the flow of information essential to continued efficient and effective operations.

Such an edict, although helpful in cutting away considerable fat, is not designed to keep the unhealthy condition from recurring. It does not solve the problems related to preparing instructions which may continue to be vague and ambiguous for those reports which are continued in force. It does not provide for the catalog or directory of reports that is essential for a sound reports analysis program, or which executives' assistants can use in establishing a suspense system for assuring prompt reporting. It does not assure a leveling of the peaks and valleys normally associated with report workload in almost every organization.

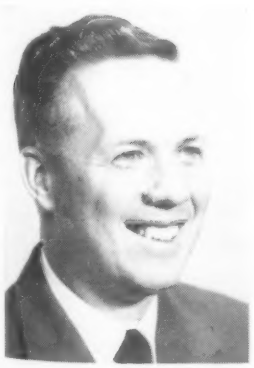
A Control Program

A reports management program is relatively simple and can more than pay for itself if approached systematically.

First, there should be a central unit, section, branch, or whatever one cares to label it, which has the authority to pursue such a program. Without exception, it should be closely linked with, if not inextricably a part of, the same organization which is responsible for the management directive system and forms control. The management directive system must be the only medium by which a recurring reporting requirement can be levied, and forms, of course, are in many cases, the ideal means for recording and transmitting information.

If reports have been allowed to get out of hand, it is most important to begin the reports management program by making an inventory of all recurring reporting requirements. Where no full list has been made previously, some requirements will, no doubt, be contained in the formal management directive system. But many will be unrecorded and therefore unknown to the reports unit. This is usually caused by some executives' penchant for exacting their requirements *viva voce* or by means of memoranda.

To attack the situation then, top management can be a big help by initially taking the approach mentioned above — stopping, after a reasonable warning period, all reports which cannot be justified, and issuing a directive which no longer permits any reporting requirements to be honored which are not set forth in the management directive system. Such an edict will, in addition to stopping unnecessary



John B. McMaster has held various positions in the Air Force Special Weapons Center, Albuquerque, N. M., and from 1956 to the present has served as Chief, Procedures and Reports Section, Atomic Energy Commission, Albuquerque. He received his B.S. in business administration at the College of St. Joseph, 1953. His articles have appeared in several business journals.

reports, automatically cause all reporting requirements thereafter to be recorded in a single place.

When all requirements have been placed in the directive system, it becomes a simple matter to do two important things: 1) to prepare and maintain a current reports directory and 2) to begin an analysis program designed to make reports a Godsend rather than a burden.

Preparation of a Directory

Report directories can be prepared in many types of formats by hand or mechanically. Therefore, before stepping off the deep end, it is well to consider the purpose of the directory.

A directory should be the means whereby the *reports control people* can readily locate a reporting requirement for analysis purposes. It should also be the means whereby *those required to prepare reports* can set up a suspense system for assuring that reports are prepared and submitted on time.

A report directory should not contain the whole story. For example, it need not include instructions for preparing reports and other incidental information. If ADP equipment is available, the directory should not be typed by hand each time it is brought up to date since the automatic equipment can do the job in a fraction of the time.

An efficient way to prepare and maintain a directory is to transcribe from the management directive system to posting documents such pertinent information as report title, management directive reference, who is responsible for the reports preparation, due dates, and the requiring agency.

Once the posting documents have been prepared, it is easy to have cards punched for mechanical runs and the directory printed. It is also a simple and economical matter to keep the reports inventory current by lifting or inserting new cards each time a reporting requirement is initiated, revised, or cancelled. This can be assured by tying this procedure in with the processing of papers being put into, revised, or removed from the management directive system.

Why and How of Reports Analysis and Control

The necessity for reports analysis and control is usually quite obvious to the poor guy at the bottom of the totem pole who must regularly prepare one or more tedious and time-consuming reports on a tight deadline. But how about the ones who dream up the requirements? Do they carefully weigh the need versus the costs involved?

A cursory survey of almost any organization will usually disclose that some form of lip service has been paid to the important function of reports control and all that it implies, but that little of real substance has been accomplished. This is evident from the fact that reporting requirements are not limited to the management directive system. It is evident from instructions for reports accomplishment which are vague, ambiguous, and incomplete; from the lack of time allowed in which to assemble facts for a report, put them into a draft, obtain necessary staff coordination, prepare it in final form, and get it into the mail; from the fact that reporting factors are unrealistic, thus presenting an entirely false picture; from the fact that the least adequate medium for presentation is selected; and that persons who have no need for certain reports are on the distribution list for them.

Horrible Example

Take this example of a situation which occurs all too often in varying degrees of similarity in a certain large, far-flung corporation. Some dreamer suddenly felt the need for certain information and, without warning, apparent reason, or staff coordination, issued via teletype, an edict that a report involving a considerable quantity of detailed material be gathered and submitted within three days.

Beneath the top headquarters there were 3 subordinate echelons, the first being made up of 12 divisional headquarters and pyramiding downward until the last field organization was encompassed.

Upon receipt of the report requirement, it was immediately apparent from the sketchy and totally inadequate instructions, that too little thought had been given to its conception. Consequently, the 12 intermediate headquarters each had a staff person frantically seek possible clarification from local staff functionally concerned with various segments of the report. Long distance calls were placed to the top headquarters, only to learn that few people there knew what was actually intended. Finally, some semblance of a reasonable interpretation was received, and instructions were prepared at each of the intermediate headquarters and sent via teletype to the two echelons beneath them. The first report was finally delivered on time, but at the expense of drawing large numbers of people from other work which went undone, and of contributing to the growth or start of many an ulcer. In addition, no two unit reports were based on identical reporting factors.

The majority of reports are not generated quite so hurriedly, but lumped together, they exact their toll of efficiency, money, and nerve tissue. How important it is then to curb and refine, through careful control, reports to the point where they can be used to materially benefit an organization.

Procedure for Reviewing Reports

The procedure for reviewing reports already in being, and those new ones submitted for acceptance, should be almost identical. The outline of a comprehensive and orderly system follows:

I. Questioning the Necessity of the Report
   A. Will the report materially contribute to the organization's mission?
   B. What will be the consequences if the report is not used?
   C. Compare the usefulness of the information to be obtained with the costs involved—compilation of material, preparation (drafts and final form), concurrences, reproduction, assembly, distribution, reading, follow-up action required, filing, and eventual disposition.
   D. Could the information required be obtained more cheaply and just as accurately by means of telephone or personal contact?
   E. Is the information required available in another report?

II. Consider the Following When a Report is Necessary
   A. *Should Tabular Reports Be Used?*
      1. These are, dollar for dollar, the best; especially when prepared on a pre-printed form, since
         a. It takes relatively unskilled personnel to compile necessary information and prepare it in final form.
         b. It is generally easy to interpret.
         c. Figures, honestly compiled, are usually more objective than narrative comments.
      2. Forms used for reports of this type should be arranged to take into consideration
         a. First, the sequence in which the recipient of the report will use the information, and
         b. Second, the sequence easiest for preparation.
   B. *Should Graphic Reports Be Used?*
      1. These cost, on the average, two to three times as much to prepare as tabular reports, since
         a. It takes a skilled draftsman a relatively long time to prepare in final form.
         b. The report (chart or graph), if distributed to more than one person, has to be reproduced by rather costly methods (multilith, ozalid, offset press, *etc,*) as compared to tabular and narrative reports which can be prepared on a typewriter.
      2. If this type is decided upon, it is important that the most suitable graph be used to depict the situation being reported.
   C. *Should Narrative Reports Be Used?*
      1. These can be considered good management tools when properly prepared and used. In fact, it is difficult, if not impossible, to convey certain information by other than the written word. By and large, however, they should be avoided in preference to other types of reports since they
         a. Usually cost more to prepare than tabular types, (although less than graphic ones).
         b. Are usually based on subjective thinking which, whether by accident or intent, colors the facts, thus reducing the usefulness of the report.
         c. Involve the problem of preparing information in such a manner as to preclude misunderstanding by the recipient.
      2. With this type, it is of the utmost importance that a logical format be used to assure proper grouping and sequence of subject matter.

III. When a Report Form Has Been Selected
   A. Is the source of information reliable?
   B. Is an appropriate title used?
      1. Short, descriptive, and distinctive. (Useful from the standpoint of identification and categorization.)
      2. Ending the title with the word "Report", when possible, as a means of readily identifying the document as a report rather than any other type of document.
   C. Is the interval between reports as great as possible, consistent with its purpose?
   D. Is sufficient time allowed for the report's preparation and submission? Time should be allowed for receipt of the report requirement, interpretation of instructions, draft preparation, initial approval, preparation in final form, final approval, and time spent in transit to the recipient. Consideration should also be given to the number of channels through which the report must travel and the fact that work done on weekends and holidays increases the cost of the report and unnecessarily disrupts morale. It should also be borne in mind that the person required to prepare the report has other workloads to contend with.
   E. Does the due date have to coincide with a month's end, or the end of a fiscal period? Remember, fiscal reports do, so spread the other type out so as to reduce the valleys and peaks of report workloads.
   F. Are instructions and requirements lucid and sufficient? Ambiguities and failure to establish norms and standards relative to units of measurement will net a report which has little, if any, real value. In addition, make units of measurement as specific as possible. For example, when it is desired to analyze causes of motor vehicle accident during a given period, it is insufficient to request number of accidents occurring in each geographical area without categorizing them as to the contributing causes; *e.g.*, driver intoxication, driver physical condition, failure to use hand signals, condition of pavement, weather, *etc.*

Conclusion

In summary, a reports control system is relatively simple and costs little compared with the savings and efficiencies which can result. It is never too soon to install a practicable one. ■

by John F. C. Close

INTRODUCTION

NO COMPARATIVE study has previously been undertaken —as far as is known—of rates of working of manual operators in industry in Sydney and in the U.S. Much is heard of the greater "productivity" per man-hour attained in the United States. It would appear from this study that this is probably obtained by means other than sheer hard work by operators; *e.g.,* better production methods, greater mechanization and, perhaps, better man-power utilization.

The performance rating films produced by the Society for the Advancement of Management (the internationa S.A.M., based in N.Y.C.) and the method of investigatio used by them in their research associated with these film

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'Average Incentive Performance' in Sydney, Australia 'Rigorously' Compared to S. A. M. Standardized U. S. Performance Rating Films on Same Operations

have been employed as described below to compare the concept of *average incentive performance* of a sample of Sydney time study observers with the average value for U.S. as "standardized" in the films.

At the end of 1959, the department of industrial engineering, University of New South Wales, conducted a course in performance rating for industrial time study observers. The enrollment included a high proportion of experienced time study observers who had attended to keep abreast of developments and to check their performance rating against the S.A.M. Films that were shown. Rating assessments for the "standardized" performance levels displayed in the films were recorded for all observers who claimed six months or more practical experience in time study. These assessments have now been statistically processed to give the results reported in this article.

Technical Considerations

It was found in the U.S.[1] that the so-called "normal" or "leveled" or "day work" level of performance varied between companies, as it depended on rating scales and systems, and the allowance for fatigue, *etc.*, which the particular company thought fit to apply.

Consequently this "normal" time cannot be used as a reliable yardstick of performance for averaging rating results between companies, as it is subject to systematic variation due to the time study parameters of each company. On the other hand, the "expected time under incentive conditions" (corresponding closely to the "standard time" of B.S. 3138[2]) is of more constant value, being divorced from the variable time study parameters, although it is conceptual in nature. For a given industrial operation (*e.g.*, one of those included in the S.A.M. films—*Sealing Cartons with Glue*) performed by a closely specified method, the average time taken by a group of trained operators, motivated to work by good average incentive conditions, and working under average factory conditions, is fixed and not dependent on the rating scale or allowance used in calculating it in a particular case.

1. *A Fair Day's Work:* The Society for the Advancement of Management, New York, 1954, and associated rating films.

2. The British Standards Institute: B.S. 3138. 1959.

The average operator expecting to be able to earn average bonus (of some 25-30% of "award" or base rate pay under Sydney conditions) works at a rate which allows him certain personal need and fatigue periods over the eight-hour day. The time taken under incentives for these requirements is a function of the average operator and does not depend on any arbitrary periods allocated by the company. This is assuming, of course, that no output restriction is practiced. The time taken per cycle for the operation over the eight-hour day, under these circumstances, corresponds to the "expected incentive time" in U.S. parlance, and to the standard time of B.S. 3138.

Due to the small number of operators in any plant on a particular operation for a protracted period, and the fact that individual operators' times tend to follow a "statistically-skewed normal" distribution pattern, it is impossible to take the results from a particular plant, and say with confidence that the sample of operators' performances is accurately an average one. The only criterion available in practice is the judgment of experienced time study personnel, who can estimate more or less accurately the standard time (B.S. 3138) for the job.

Rating Films Assessment

The S.A.M., in their comprehensive survey on this subject associated with the production of the rating films, were able to have each of the five scenes of each of the 24 filmed operations assessed by 1200 trained time study observers from 181 different U.S. companies located in widely different regions. These assessments of the expected incentive time over the eight-hour day were calculated out and averaged for each operation, giving a "composite time", which is then the "standard" for that operation. In rating practice, the observer's assessment of performance rating and allowances on each of the scenes is compared with the rating (on the same rating scale) and with the same allowances required to produce this "composite time" for the operation, this latter being referred to as the "true rating".

In the work carried out in Sydney, the ratings and allowances on each of the five scenes of three of these operations given by the local time study group were recorded. The resulting expected incentive times were averaged, and compared with the S.A.M. standardized composite times. This gives an indication of expected rates of working as compared to the U.S.

In selecting the operations to be examined in this way it was decided to select from the 24 operations filmed (each at 5 different performance levels) 3 which were typical repetitive industrial operations, and which, furthermore, did not include "extreme" performances. The three operations selected were

1) "Fold Gauze Pad" for respirators from 18" x 18" gauge — a woman's job — (Operation E of the films)
2) "Tape Boxes Together" — a woman's job from a cosmetic or grocery warehouse — (Operation P)
3) "Seal Cartons" with glue — a typical shipping department job. (Operation Q).

The three operations gave ratios of poorest to best times occurring in the five scenes of 1.37:1, 1.47:1 and 1.29:1 respectively. This is important, as witnessing extreme performances has been found by the S.A.M. to exert an "anchoring" effect on the observer's judgment, causing him to display errors in his ratings of subsequent performances of the same operation.

Five scenes of each of 15 other operations were also rated by the local observer group, but these ratings were rejected for the detailed analysis of this article, as the operations included some scenes of extremely fast and slow performances, difficult to assess accurately. Ratings given on these might have been misleading guesses.

Procedure of This Survey

Each operation was 1 of 3 in a silent film running for about 25 minutes. The operations, say P.Q.R., were shown in the sequence, a scene from P, one from Q, then one from R, and then P again and so on. The scenes of each operation were arranged in random performance level sequence.

The film was first screened, while a description of the operation (provided with the film) was read out to observers to give them an appreciation of the job difficulty and conditions. This also gave the viewers a chance to gauge the range of performances possible, and to give a better assessment. The film was then screened a second time, stopping briefly after each scene while the observers recorded their rating assessment.

The speed of the projector was checked before and after each screening, and was always within $\pm 1\%$ of 16 frames per second, which was the standardized speed required.

Observers were required to specify the rating scale they were using. For each operation rated they were asked

1) What total allowances (personal needs, fatigue and unavoidable delay, *etc.*) they would give
2) What level on their rating scale they would expect trained operators on the average to attain under average incentive conditions.

For each scene (*i.e.*, different performance level), observers were asked to write down the rating they would give under the above conditions.

The actual cycle time for each scene of each operation was provided in a table accompanying the films. The S.A.M. standardized "composite" time, or grand average expected incentive time over 8 hours was also given for each operation. Observers were not told these times before they had rated the films.

Calculations

The ratings given for each scene by each observer were first applied to the scene actual cycle time to extend it to a Basic Time (B.S. 3138) or to convert it to a "normal" time, depending on the scale used by the observer.

The times so obtained for each scene were averaged for each observer. From this average result, the expected incentive time over the eight-hour day (the Standard Time of B.S. 3138) was calculated for each observer. These times were no longer a function of the parameters used by the particular observer (*i.e.*, his rating scale and allowances) and were averaged over all observers of the group.

This grand average expected incentive time was then compared with the S.A.M. "composite" time for the operation.

A sample calculation for the "Fold Gauze Pad" operation is given in Table 1.

Sample Calculation

Observer A gave his rating scale as 100/133. His average expected incentive performance level, and total allowances for this operation were 125 and 15% respectively.

Table 1

Scene	Rating Assessed by Observer A	Actual Time for Cycle (from tables)	Calculated Normal Time—Mins.
1	122	.0880 mins.	$.0880 \times \frac{122}{100} = .107$
2	115	.0975 "	$*.0975 \times \frac{115}{100} = .112$
3	110	.0975 "	$*.0975 \times \frac{110}{100} = .107$
4	95	.0843 "	$.0843 \times \frac{95}{100} = .080$
5	100	.1151 "	$.1151 \times \frac{100}{100} = .115$
			Total .521

$$\text{Average normal} = \frac{.521}{5} = .104 \text{ mins.}$$

STANDARD TIME† = .104 × (1 + .15) = .104 × 1.15 minutes.

EXPECTED TIME at 125 rating over 8 hours = $.104 \times 1.15 \times \frac{100}{125} = .096$ minutes.

* Times for Scenes 2 and 3 happened to be similar in this case.
† This is *not* B.S. 3138 Standard Time here, but at "day work" level.

The time of 0.096 minutes was then averaged with the expected incentive times for all other observers.

Ratings given by observers using the 60/80 scale and the 0 - 100 scale were treated correspondingly.

The figure of .096 and corresponding values for other observers were then squared, the standard deviation for the group estimated, and a 95% confidence interval for the Grand Average calculated from the "Students t" Distribution Table of analytical statistics. Results are given in Table 2.

Results

Table 2

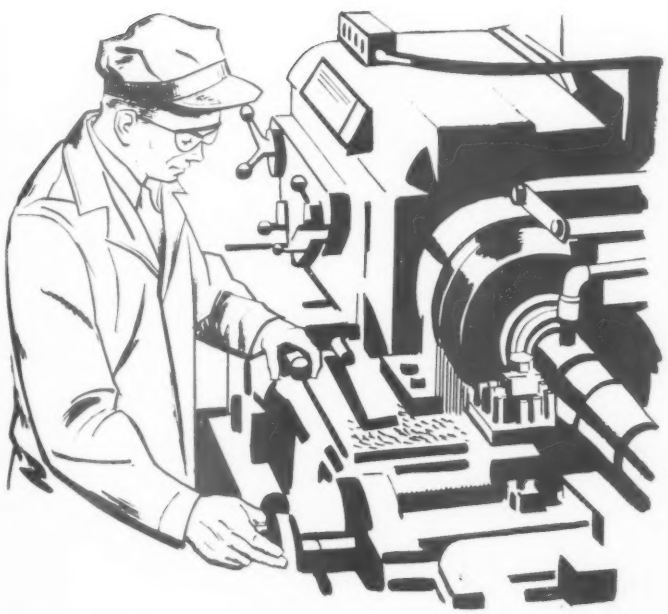
Operation	S.A.M. Composite Time—Mins.	Number of Observers in Group	Observers' Grand Average Expd. Incentive Time Mins.	95% Confidence Interval
Fold Gauze Pads	.1025	46	.1004 ± .0016*	.0988 — .1020
Tape Boxes together	.3400	41	.3287 ± .0240	.3047 — .3527
Seal Cartons	.5150	41	.5126 ± .0194	.4932 — .5320

* This result is less than the composite time (indicating a faster pace of working) to a level somewhat more significant than 1%. However, actual difference involved is only 0.5% of the time value outside the 95% confidence interval. The speed of the projector was known only to ±1%, so that this difference cannot be regarded as statistically significant.

Conclusions

It appears that the expected incentive performance of Sydney factory workers, based on a reasonably representative sample of 35 companies, is not significantly different from that obtaining in the U.S.A. on the average.

The less rigorous analysis of the rating results in 15 other operations shown in the S.A.M. Rating Films (but not reported here) supports this belief. ■



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by Daniel Gro

THE JOB of successfully selecting an individual to perform a task requires an understanding of the personality of the candidate. Whether the job be that of president of a company or janitor, professor of a university or student, successful selection involves a consideration of personality as well as the recognition of the candidate's skills, technical knowledge, education or training, and physical capabilities. Personality is used here in a broad sense, referring to the pertinent distinguishing qualities of an individual. In selecting. the attempt is made to predict behavior accurately.

Describe and Interpret

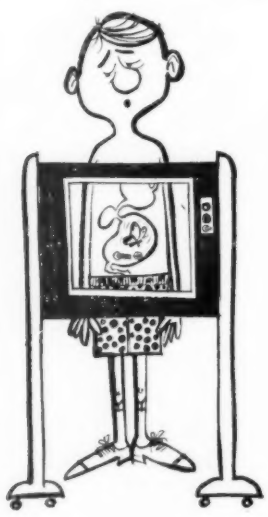
The complexities of the selection procedure are focused in the area of prediction. First, the selector must describe the personality of the candidate. Second, he must interpret so as to make meaningful and accurate statements of what will happen when that candidate is in the job for which he is applying.

Experience in analyzing and describing personality has led psychologists to emphasize the differences among individuals. Individual difference is illustrated by the following example. The health, family, educational, and social histories of two boys were much the same. Neither of these boys had spent much time away from their home town. Upon graduation from high school, they both started out as office boys in a good company. Now, 40 years later, one of those office boys operates faithfully as a clerk. The other sits in a paneled office and presides over a company many times as large as the one he joined four decades ago.

The question born of this example is, "What were the differences between these two individuals that led to the different ends?" Recognizing that differences are important is a step toward the understanding of personality. Another step—a most important one—is answering the questions, "What are the kinds of differences, where do these differences lie, what is the significance of these differences"?

Prediction Aids

Experience has shown that an understanding of six characteristics of the personality aids the psychologist to predict behavior. These areas are 1) intellectual competence 2) emotional stability or maturity 3) motivational characteristics 4) insight 5) human relationship skills and 6) degree and kind of special talent or skill. These six concepts are not mutually exclusive, nor do they all exist at the same level. For example, intelligence, emotional maturity, motivation, and insight all underlie or have effect upon human relationship skills. Both intelligence and emotional maturity have their influence on the motivational characteristics of an individual. Inter-related as these factors may be, they help us locate pertinent areas of individual difference. They also provide a convenient and meaningful basis for describing differences in human behavior or personality.



A spelling out of these personality characteristics will help students of human behavior (a phrase which includes us all) to describe and understand behavior. Description and understanding are fundamental to prediction. First let us look at intelligence.

When the psychologist considers the area of intelligence, he asks not only *how much?* intelligence the person has, but also *what kind?* and *how used?* Of course, the psychologist wants to know the individual's capacity — how he compares with others as to degree of intelligence. This information is usually obtained by tests. However, research has indicated that a skilled clinical psychologist can predict accurately how well a person will perform on intelligence tests by interviewing him.[1]

But intelligence is not just one thing, it is many. Dr. David Wechsler has defined intelligence as "the aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment".[2] There are many kinds of problems to solve in dealing with one's environment — be it at school, at work,

[1] J. Watson Wilson, "Correlation of Clinical Estimates with Test Scores on Mental Ability and Personality Tests," *Journal of Clinical Psychology*, January 1954, pp. 97-99.

[2] *Measurement of Adult Intelligence*, (Baltimore, Waverley Press, 1944), p. 3

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or at home. So, too, there are a variety of intellectual factors. A profile of intellectual factors may show a relatively even distribution of mental ability over the various types. On the other hand, there may be vast differences between a person's ability to perform in one, as compared with another, situation. Meaningful descriptions of intelligence, therefore, must include a spelling out of the degree of facility with which the person can work with various kinds of problems.

Distinction Between Capacity and Its Utilization

The third aspect of the study of intelligence is that of intellectual efficiency. The smart but unproductive individual is known to us all. Such persons illustrate the difference between capacity and the use of capacity. Some individuals are creative, original, and inventive. Others, who score as well on quantitative tests, may use a stereotyped or unimaginative method in their problem solving. These persons may persist in old methods of obtaining solutions to problems while ignoring more appropriate means of getting an answer. Thus, predictions must be made not only on how much intelligence a person has, but on how well he uses it. Examples of the difference in intellectual functioning are often seen in college where the student with average ability may get a good solid C, while his intellectually superior classmate is dropped from the university for poor grades. An industrial example has been given by W. Harold Rea, president of Canadian Oil Cos., when he found that he was working at less than full efficiency, even though successful.[3]

How does an intellectually able person perform? He is consistent in reaching accurate solutions. He does not let outside factors influence his problem-solving ability. He is able, also, to reach sound practical judgments. When faced with uncertain situations, he consistently makes the better choice. He not only makes a choice, but he sees ideas through to their logical conclusions. He is able to recognize the consequences of the actions he proposes. Finally, the person who uses his intelligence efficiently is able to exercise his imagination. In doing so, he can put things together in a new and different way; he evaluates; he is constructively self-critical and willing to be objective; he has the strength of his convictions. It is obvious that there is much more to intellectual performance than intelligence!

Emotional Maturity

Another major factor in the prediction of behavior is that of emotion. Emotional immaturity may underlie intellectual inefficiency in some individuals. Therefore, psychologists place emphasis on learning about an individual's degree of emotional maturity. People have emotions — this must be accepted. However, those who function most efficiently make use of and enjoy them. These people are not ruled by their emotions.

Differences in handling emotions were evident recently when the president of a company called to his office three employees who were to be congratulated for their part in an outstanding piece of work. He called each on the phone and asked, "Would you come up to my office for a minute?" The first man's reaction was, "I wonder what he wants? Maybe that report has reached his desk and he has some questions about it." The second's reaction was, "Oh, no! Now what have I done wrong? Maybe he has found a mistake in that report." The third reacted, "You know, I bet he liked that report."

All three men had rated a "well done." But their feeling about the work varied. The feeling they had could not help but influence their behavior.

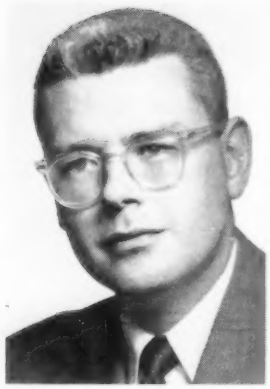
Briefly then, psychologists accept emotions as part of personality. They investigate how these emotions affect the individual. As a person attempts to reach his goals, no matter where they lie, he will meet barriers in his path. The adequacy of his emotional maturity is measured in a variety of such frustrating situations. Questions asked are, "How does he handle his feelings when frustrated, what effects do his feelings have on his performance?"

Emotional maturity is displayed in a number of ways. An estimate of maturity can be gained by noting if a person's feelings are in line with intelligent self-interest. For example, you may be justified in feeling "put out" if you are criticized. Yet no amount of annoyance will help you meet the criticism. As a matter of fact, annoyance may spoil your whole day.

Traffic Jam Makes for Problem's Solution

The meeting of a barrier in a constructive manner was illustrated by a psychologist who took some of his own advice. He had been presented with an unusually vexing problem by one of his clients and had not been able to come up with a solution. On his way to keep his appointment with his client, he was caught in a traffic jam. All around him horns were blowing, motors racing. Unable to

[3] "Your Business May Be Only 25% Efficient", *Financial Post*, April 2, 1955.



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move the car, the psychologist turned off the motor and set to work on the troublesome problem. Though late for his appointment, he arrived with a workable solution and a feeling of accomplishment.

To judge emotional maturity, then, one must observe the person's success in handing emotions, not the extent to which he is without them. Appropriate emotional control involves channelizing emotions — not the suppressing of them. Often, holding emotions in, either consciously or unconsciously, may cause physical harm and illness. A man with psychogenic ulcers is not handling his emotions in accord with his own intelligent self-interest and, therefore, not in an emotionally mature way. If we know how a person controls his emotions, we have taken the first step in describing his emotional maturity.

The second step is to learn what form of adjustment is characteristic of the person's response to difficulties. There are many ways to respond when you go to the refrigerator for a bottle of beer and find none. You may hit the refrigerator; you may cuss your wife for forgetting to buy some more; you may cuss yourself for going past the store without remembering to stop for some. You may shout to your wife, "Hey, honey, do you want anything downtown? I have to go out and buy some beer." You may do without, feeling disappointed, hurt, or picked upon. The way one adjusts to the barrier (no beer) has to do with one's emotional maturity.

Some of the signs of the mature personality are 1) the ability to have feelings which are to one's own intelligent self-interest (immature emotions are self-defeating and unpleasant to live with) 2) the ability to display a consistent pattern of overt behavior, behavior that is purposeful and focused toward some rewarding end (motivation is involved here, too) 3) the ability to make prompt, satisfying, and final choices between alternatives and 4) above all, the ability to accept oneself — both one's personal assets and personal liabilities.

Constituents of Motivation and Their Interplay

Motivational characteristics, too, must be noted when describing the individual. This area of personality historically has been difficult to cope with. More and more it is being investigated, described, and pinned down. Under the heading of motivation it is helpful to consider three concepts: 1) the goals of the individual (these are the things he wants to achieve, on both a long-range and a short-range basis, at home, at work, and in his social life) 2) the needs of the individual (these are the bases of reward, the purposes served by achieving certain goals) and 3) the degree of drive (the force and activity exerted toward achieving the goals or satisfying the needs).

Goals, needs, and drive have a high degree of interrelationship. Perhaps a simple way to illustrate the concept of a person working to achieve a goal is to speak about a railroad. For a railroad to operate it must have an engine (capacity). There must be steam in the engine (drive). More than that, there must be a place to go (goal) and a payload or reason to go there (need). The railroad's managers must have chosen a path and laid tracks (method of approach to goal). The timetable by which the railroad runs is analogous to a person's timetable, by which he proposes to work to achieve his goals.

We can have a railroad without all these factors, but an efficient one has them all. To translate this into human terms, a person can exist without goals—yet he will not make full use of his capacities unless his goals are well defined. A well-integrated person is efficient because he knows what he wants to achieve and knows it is within his capacity to achieve it. He aims neither too high nor too low. Also, he sets up his goals so as to obtain personal satisfaction. To do this he must know his personal needs. A person who knows himself can set up purposeful and meaningful goals, ones from which he can gain satisfaction and ones he can reach.

Facets of Insight

The concept of knowing oneself leads us into another area of personality: insight. Insight is the ability to see into, to understand, to penetrate. This ability falls into three important areas: 1) insight into things (this is the ability that leads to invention) 2) insight into others (this is the ability that allows one to interact effectively with others) and 3) insight into oneself (this is the ability that leads to efficient utilization of one's talents).

Without insight an individual cannot make efficient use of his intelligence. An example will illustrate this. The head of the engineering department of a nationwide company argued that one of his employees was not intelligent. Yet on tests of intelligence, that employe's mental ability ranked in the top one-tenth of one per cent of the general population. Was the test wrong, or was the department head wrong? Neither! The man did not perform in accordance with his

test score. A close examination of his personality revealed a complete lack of insight. Without self-understanding he became so involved in emotional problems that he had little energy left to focus his ability on his job. Only after a long and difficult program of personal development was this individual able to make efficient use of his very superior mental ability.

Insight is the key to personal growth. Through insight, problems are defined and courses of action set. The person who is insightful recognizes his own assets and liabilities. He is aware of the effects these strengths and weaknesses have on his attempts to reach his goals. Because he knows, he can take appropriate steps to further his ends. Without insight, the approach to goals is governed by trial and error actions, or is stalled completely.

Insight shows up in several important ways. An insightful person can *sense* the feelings of others. His behavior and overt attitude are appropriate in responding to others, for he is sensitive to their needs and wants. An insightful person is aware not only of what a person is doing, but of the reason he is doing it. He is conscious of the subtle implications of behavior.

Skill in Human Relations

The four factors of personality mentioned above are underlying personality characteristics. They become manifest in the manner in which a person approaches others and his job. Approaching others effectively is an art which may be called skill in human relations. Much has been published on this subject. Let it suffice for our purposes to outline the areas in which skill in human relations may be investigated to help in the prediction of behavior. Two leads may be considered. On the surface level, a study of human relations skills becomes a study of the individual's social competence—how he relates with other persons in his day-to-day contacts with them; how he presents himself in his interactions with his superiors, peers, and those he supervises or directs. It is a study of his ability to communicate with others, both as a *sender* and as a *receiver*.

On a deeper level, the study involves the degree of satisfaction he receives from various kinds of relationships developed among persons through interaction. Does he get along with others because he has to, or because he enjoys it? A recognition of individual characteristics at this level is of value to the predictor.

Degree of Ability

The sixth area has gained the greatest amount of attention to date. At times it has been the sole criterion for selection. It is the degree of skill or talent of the candidate. By considering the other five criteria in conjunction with the sixth, its importance is not diminished. It takes on perspective and greater meaning.

Special skills and talents may be quickly and accurately assessed. Many testing devices have been constructed to measure mechanical, clerical, linguistic, and musical ability. Yet no single instrument has been successful in isolating the many skills that lead to success in less-well-defined jobs such as student or administrator. Here must be considered the individual's ability to organize, systematize, and order processes and time—one's own and that of others. In the case of the administrator, skills of leadership are important — putting others at ease, performing with assurance in diverse situations, skillfully presenting and opposing ideas.

Behavior Prediction Bases Reviewed

For successful prediction of how well a person will do in a job that requires general ability to interact with others and make decisions, we must go back to the first five areas of personality. Learning and problem-solving are dependent upon intelligence. Emotional maturity is involved in the ability to adjust and handle frustrating problems. Motivation is concerned with setting up direction, determining degree of drive, and establishing the basis for interest. Insight is related to the recognition of problems and the inventiveness by which they are solved. And human relations skills have to do with the actions stemming from an insightful analysis made by a well-motivated, mature individual.

Prediction of human behavior is based on these data. They are obtained from the candidate himself. He is the only person who has the answers to the multitude of questions the selector must ask. It is up to the selector to train himself to know what to look for and to recognize what he sees. By looking at the person as well as the job and the test scores, a more accurate prediction of an individual's performance can be obtained. With accurate prediction, selection may be made to the optimum interests of the individual and the company. ■

A CODE FOR INDUS

Ethical Code of Behavior Held Essential To Purchasing Agent's Self-Respect, Self-Confidence In 'Commonwealth' Business Role

ON JULY 22, 1960, the *New York Times* reported the forced resignation of the president of the Chrysler Corporation. It was revealed that he had interests in two companies that sold parts to Chrysler. Shortly thereafter, a purchasing agent was discharged for "a violation of company purchasing policies".

As a consequence, employe morale scraped bottom, with purchasing department employees casting sidelong glances at fellow employees in the department. (Three stockholders filed suit, asking that Chrysler be placed in receivership and charging "gross and unconscionable mismanagement".)

This is not an isolated case. Recent similar instances of questionable purchasing practices have stimulated anew consideration of an ethical code for purchasing people.

Honesty and Prudence

Ethics practiced by the staff in a purchasing department basically differ little from the ethics of any other department of a business concern. However, unlike most departments, the purchasing department is clothed in responsibilities which entail not only the exercise of honest, but also prudent practices to prevent any indirect action not in the best interests of the company.

Purchasing officials serve figuratively as trustees of company funds. In that capacity, they must act as a "prudent" man in carrying out this trust. They must spend the funds of the company wisely — at all times in the best interests of the company. They must exercise such care as a responsible man would exercise in managing his own affairs.

Several specific policies which are widely followed constitute evidence that much purchasing is now done along ethical lines. For example:

1. Orders are placed as a result of competitive bids.
2. Specifications are not written around the product of one manufacturer.
3. All bidders are given all of the terms and conditions surrounding the job.
4. Bidding information is kept strictly confidential.
5. The purchasing department is strictly neutral in its attitude at all times and must do everything possible to get bids which are truly comparable.
6. The bids are thoroughly analyzed and the transaction kept free of partiality, favoritism, or prejudice so that after the order has been placed, should there be a post-mortem examination, the facts in the case will completely substantiate the action taken.

Guides For Purchasing Conduct

At times, however, the purchasing department representative is in direct association with vendors who seek to effect the responsibility of the one who makes the final decision.

Pressures from colleagues who have friends or relatives among vendors or vendors' representatives may embarrass a purchasing agent. Such embarrassment is avoided by adherence to the "Caesar's Wife" policy of being above suspicion in making purchasing decisions.

Decisions should be honest and unselfish so that they may not be questioned even if the results show that the decisions were unwise or inexpedient.

III. TO BUY WITHOUT PREJUDICE, SEEKING TO OBTAIN THE MAXIMUM ULTIMATE VALUE FOR EACH DOLLAR OF EXPENDITURE.

All human beings have prejudices, conscious or unconscious. We cannot, we must not, let these prejudices interfere with the purchasing process. Adherence to a standard operating procedure frees us from the fears generated by the possible influence of even subconscious prejudices.

IV. TO STRIVE CONSISTENTLY FOR KNOWLEDGE OF THE MATERIALS AND PROCESSES OF MANUFACTURE, AND TO ESTABLISH PRACTICAL METHODS FOR THE CONDUCT OF HIS OFFICE.

TRIAL PURCHASING

by Raymond R. Colton

In the purchasing profession, "ignorance is not bliss"; it is the equivalent of misconduct in office. The purchasing official must have a thorough knowledge of materials purchased and processes entailed in their production. Such sales by circumventing fair competition. Because of common problems faced by purchasing agents on this score, the National Association of Purchasing Agents has created the "Principles and Standards of Purchasing Practice" as a code of behavior.

These "ten commandments" are worthy of serious study and adoption by all those engaged in purchasing. In the following presentation, each "commandment" is analyzed.

I. TO CONSIDER FIRST THE INTERESTS OF HIS COMPANY IN ALL TRANSACTIONS AND TO CARRY OUT AND BELIEVE IN ITS ESTABLISHED POLICIES.

As an employee of a company it is one's duty to act in its best interests at all times. There are instances where the standard operating procedures and policies may be counter to one's personal beliefs. Nevertheless, the "rules of the game" demand faithful adherence to company policy.

Authority is entwined with responsibility. Accordingly, it is incumbent upon all employees to abide by established rules, if only to prevent a breakdown of orderly management operation.

II. TO BE RECEPTIVE TO COMPETENT COUNSEL FROM HIS COLLEAGUES AND TO BE GUIDED BY SUCH COUNSEL WITHOUT IMPAIRING THE DIGNITY AND RESPONSIBILITY OF HIS OFFICE.

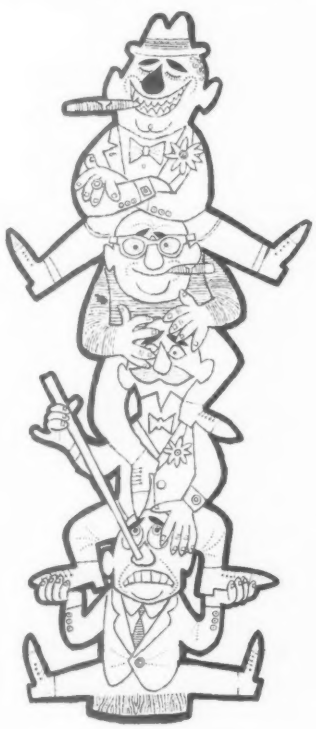
The latent Napoleonic complex of all men erupts in some who occupy a decision-making position. They resent advice and are bitter if their judgment is criticized.

Maximum gain to a firm is secured through the most efficient techniques for handling management problems. An effective method of problem solving, where time permits and the importance of the problem justifies the technique, is to "pool" the judgment of associates.

This technique encourages recognition of their knowledge and experience without detracting from the authority and information enables him to recommend as substitutes, more economical or more efficient materials.

He owes a "stewardship" obligation to the company; this entails keeping informed. Good faith, honest intentions, ignorance, or inexperience do not excuse carelessness or imprudence.

Purchasing education has no terminal point. Reading pertinent literature from trade publications, trade associations, and government agencies; visiting production firms,



attending conventions — even studying at professional schools — are all essential components of the continuous education of the purchasing agent.

V. To subscribe to and work for honesty and truth in buying and selling, and to denounce all forms and manifestations of commercial bribery.

It is unbecoming a professional purchasing man to resort to bribery, directly or indirectly, for unfair advantage. First, it is against the law to be a party to bribery as a recipient of gifts, favors, or personal benefits. Acceptance of these constitute inroads on a purchasing man's honesty in making decisions. Having knowledge of, condoning, authorizing or ratifying improper conduct does not shield the purchasing official from its consequences. Loyalty to oneself and one's own interests derives from an entirely human, perhaps instinctive need for self-preservation and desire for personal advancement. Where there is a conflict of interest, it must be resolved. Personal interests may not be enhanced at the expense of the corporation; they must be subordinated where there is a conflict of interest.

VI. To accord a prompt and courteous reception, so far as conditions will permit, to all who call on a legitimate business.

It is common decency for a purchasing man to recognize the importance of the most precious possession of a salesman — time. It is a violation of basic business ethics to advise a secretary to "keep him waiting" or "tell him I am on a slow boat to the Orient".

The largest firms allocate set periods during the week, as on Thursday afternoon, when salesmen may be seen promptly. In addition, salesmen are seen at any time by appointment.

However, it is poor business policy to allow salesmen to visit freely, at their convenience, without prior notice. Such a policy leads to mutually embarrassing losses of time due to business interruptions and results in hurried decisions, later regretted.

VII. To respect his obligations and to require that obligations to him and to his concern be respected, consistent with good business practice.

— Fabian Bachrach

A native New Yorker, Raymond R. Colton received the degree of Ph.D. in economics from Columbia University. He has taught at the School of Business of the City College of New York since 1931. Dr. Colton, a management consultant, is the author of several technical management books and many magazine articles. He is a member of the American Economic Assn., American Marketing Assn. and the Academy of Management.

Basically, a buyer holds "the sword of Damocles" over the heads of salesmen. To take advantage of an unequal position by demanding privileged services, prices, or discounts which circumvent accepted business practices is unethical. This does not mean that business negotiations and bargaining are outmoded.

VIII. To avoid sharp practice.

Sharp practices are the trademark of the "fly-by-nighter", who goes in and out of business without scruples. The stable, permanent businessman is careful of his reputation. He refuses to have it sullied for a "one-shot" gain at the expense of another.

The purchasing man avoids the possibility of destroying the reputation of a firm by engaging in any such practices. This does not mean that he waives the right to reject goods that do not comply with specifications or that he does not insist that vendors meet the terms of purchase orders. Nevertheless, he must be aware of unforeseen contingencies that interfere with the best intentions of vendors.

IX. To counsel and assist fellow purchasing agents in the performing of their duties, whenever occasion permits.

In any profession, it is incumbent upon the members to aid one another. First, it raises the standards of practices. Second, it maintains such practices at high, ethical levels. Third, aid by its nature is reciprocal. When we help others we help ourselves. We never know when such help will rebound.

X. To cooperate with all organizations and individuals engaged in activities designed to enhance the development and standing of purchasing.

Purchasing a Part of the Whole

Purchasing is not an island within the business world. It is more like a member of a "commonwealth of professions" including marketing, engineering, production, foreign trade, accounting, industrial management, traffic management, *etc.* Accordingly, it is essential for the purchasing profession to participate in the activities of the other members of the "commonwealth". This entails exchanges of views, problems and experiences with engineering concerning substitute materials, with production on product performance, with inspection on quality control, with accounting on discounts, *etc.*

Summary

Every organization, like every individual, in order to remain within the scope of the law, maintain respect for and confidence in itself and enjoy the respect and confidence of others, must set up and live by some ethical and moral code of behavior in conformance with accepted principles and standards. The purchasing department is an integral part of a business structure, carrying out varied and numerous functions of major importance; therefore, the need for ethics in purchasing is consequently magnified. In his business dealings, loyalty, justice, faith, and common decency are of prime importance to the purchasing agent. ■

Universal Application of a Work Achievement Unit

by Eino O. Ilmonen

We see that the physical and mechanical units of measure are very accurately defined. Most of them have been put to an agreed use throughout the world. Wherever two or more units of measure for one and the same quantity are in use, their ratios are precisely defined. In foreign trade, for example, precise grounds for exchange of goods can be agreed upon almost without exception.

Also in industries where, due to the qualities of the amount to be measured, the units cannot be exactly determined, units determined by limit values are in use and meet all practical requirements. Metallurgy and textile technology are two examples.

In this way, various measuring units to meet practical requirements have been arrived at, and production, exchange of products, purchase and sales, *etc.*, in economic life are based on them. Disagreement may prevail on the prices of products; the ideas held by the buyers and the sellers may differ greatly, but seldom is there such disagreement on the product itself that it cannot be validly agreed upon before or — at the latest — at the outset of price negotiations. For this we are indebted to international units of measure and their ratios.

Eino Ilmonen graduated from Finland's Institute of Technology in 1931, obtaining his doctorate there in 1947. He has worked in several engineering firms and since 1947 has been the vice president of Lokomo Oy, Engineering and Steel Works, in Tampere, Finland.

Need for Unit to Measure Work

However, this does not apply to measurement of work. No sufficiently, accurate, univocal, universally-applicable, single unit of measure for work achievement exists, as yet, to enable the performance to be measured to such a degree of accuracy that, when discussing the sale of work achievement; *i.e.*, bargaining on wages, the scale of work achievement could be measured by these units, and the discussion could concentrate on wages only. When the work involved is not agreed on in terms of an accepted unit of measure, it means that an essential part of the sales contract remains open, and disputes as to the exact amount of work bargained for are put off to a later date. A comparable situation would arise if, for instance, at the sale of a 10-meter length of material, the buyer and the seller should first agree on how much the yardstick by which the material is measured should be "extended"; or, if a man bought a pound of butter without settling the weight to be employed for weighing the butter, and so left it for his wife to judge whether the purchase was advantageous. This is not how trade should be conducted when work achievements are sold and bought.

Earlier Attempts to Establish Unit

Attempts to arrive at work achievement units are by no means lacking. A short survey will be given below. (For the sake of simplicity, all source and other references have been excluded from the present paper.)

Everyone knows that a job can take a long or a short time. If the working mood is good and you are in a hurry, the job will be finished much more quickly than at a leisurely work pace. A walk from one point to another may take a longer or a shorter time. Which time is equivalent to the unit of measure of work achievement?

Frederick W. Taylor attempted a solution of the problem by determining the shortest time within which a job could be done using the best method. Later work analyses in many countries tried to determine the so-called "average achievement," which refers to the mean value of the individual achievements of a large group of reasonably skilled workers. Creation of more definite work achievement units was also attempted. Bedaux used walking on a level road at a rate of 4.4 km/h, which he considered the normal walking achievement, as a basis of comparison for the rate of work achievement. As a later development, many countries introduced a so-called normal achievement, corresponding to a walking speed of 4.8 km/h. In recent years a number of systems (MTM, work factor, *etc.*) have been developed to compute synthetically, from original elements based on extensive studies, the time required for a certain job. The work achievement level, according to which the times of the original elements are calculated, constitutes a work achievement unit.

This concise but incomplete survey may suffice to show that efforts have not been lacking to determine the work achievement unit. However, no univocal, definite unit of universal application has yet been determined. Different countries have worked along different lines, and some have decided to wait and see. It is striking that the Refa-Buch as late as 1952 omits the exact definition of normal performance.

It may be reasonably claimed that the search for a universally applicable definition of work achievement unit has not yet advanced even so far as could be expected considering the achievements of other sciences. Why is it that progress is so slow on this extremely important problem?

Apparently, one or several of the following questions, point to the cause of the present state of affairs:

1. Is a universally applicable unit of work achievement not considered necessary?
2. Is it too difficult to arrive at?
3. Have the geographical factors (different working conditions and different qualities of workers in different countries) made the task too difficult?
4. Have various circles of interest, primarily employers' and workers' organizations, found that exact definition of work achievement would be detrimental to their work?
5. Has there been no organization to initiate or lead the work?
6. Is the problem not ripe yet?

In answer to these questions, the following statements may be ventured:

1. It is certain that time study men, especially those doing research in more than one country, have seen the disadvantages caused by the lack of a universally applicable unit. But those remaining outside this fairly small circle of experts have hardly devoted much thought to the problem and so may not be aware of the existing lack.
2. As far as is known, no serious attempt has been made so far at arriving at a work achievement unit applicable universally without modification in most industrial countries. Many countries use roughly similar units, and a number of countries have several units in parallel use; their ratios may even lack detailed definition. Doubtless the present technical level would permit the creation of a unit sufficiently accurate for all practical purposes. The difficulties are to be found elsewhere.
3. The practices of different countries were referred to above. It is obvious that geographical factors and the differences in human material make it difficult to arrive at a unit applicable in all countries. However, this does not make the task too difficult, since based on one unit, all the differences in the level of real work achievements arising from these factors may be taken into account.
4. There are reported cases in which management and labor organizations have considered too-accurate definition of work achievement level in collective bargaining disadvantageous for practical application. They have thought that it might reduce the chances of utilizing the law of supply and demand to secure advantages. Evidently such a belief is unrealistic. The more precisely the ratio between work and wage can be defined, the better are the chances, thanks to collective bargaining and organized working conditions, of long-term industrial planning and development for the benefit of all concerned.
5. No serious initiative has been taken as yet to create a work achievement unit applicable in all countries, although there are cases of attempted agreement between neighbor countries, and many small countries have tried to apply methods adopted by big industrial countries. No international organization has included the problem in its program.
6. At the present moment, when every effort is being made to remove the traces of World War II, the living standard of the nations is being raised by international activity and common market areas are becoming realities, the time is doubtless propitious for creating a work achievement unit. It may be claimed, with good reason, that many an international problem would have been more easily solved if, in settling the numerous questions involving prices of raw materials, driving power, capital, transports, expertise, *etc.*, the work achievement equalling; *e.g.*, the current hourly earning in given conditions, would have been clearly defined.

The Opportunity Today

It seems that the present moment is suitable for an attempt to arrive at an internationally recognized, universally applicable, and sufficiently accurate unit of measure of work achievement. A great deal of study and preparatory work has already been carried out in different countries, and the necessary mechanical, physiological and psychological factors are sufficiently known. What is required is analyzing

paralleling, compiling, and organizing available data, and making realistic effort towards a final result. This is impossible without an international organization comprising all industrial countries.

Starting from the present situation, it looks most probable that the work achievement unit may best be reached by developing either Bedaux's normal achievement based on walking, making use of films, *etc.*, by which the unit, when required, may be compared to the cases in practice, or by taking MTM or a similar system as the basis and developing it further.

This is probably the present situation. In most United States industries interested in these problems the unit applied in practice is developed from MTM of similar systems. Sweden has recommended that work achievements be based on MTM timing plus 10%. In Finland the normal achievement unit most commonly used in work study is walking at 4.8 km/h. In Germany the situation seems unclear, and the same applies to a number of other countries as well.

The introduction of a universally applicable unit of work achievement would, of course, lead to discussions and studies of the level of practical work achievements. Many different factors should be considered. One of them is the limit of work achievement: the limit that cannot be surpassed without producing fatigue detrimental to the worker and which shortens his total life achievement. The question of the reasonable working hours per day, week, and year must be studied. This gives rise to questions of old age pensions, sick pay, and unemployment grants. No one will raise his work achievement close to the danger point unless sufficient protection is guaranteed to those who, through no fault of their own, "get tired" prematurely.

White collar work is also in part measurable by work achievement units. This emphasizes the importance of universal methods of merit rating and of taking into account the latent qualities in a person.

The above brief outline of questions may suffice for the present purpose. If and when work is started towards creating a universally applicable work achievement unit, the extent and nature of the problem and dependent problems must of course be defined, so that the study can be organized and aimed at the necessary subjects. It may be repeated that the effort towards creating a universally applicable unit of work achievement is a task deserving serious attention at the moment. The advantages to be secured appear to be considerable.

Advantages of Developing a Unit of Work Achievement

Here are some of the advantages:

1. There would be a work achievement unit ready to be applied by the employers, workers, time study men and those carrying out economic calculations in different countries, which, with certainty, would be similarly interpreted by all concerned.
2. The work achevements that can be reasonably required of a normal worker under different conditions without risk of overstrain would be discovered. This is important when the price of work achievements is discussed.
3. It would be possible to indicate by figures the effect of geographical factors (*e.g.*, tropical climate) on reasonable work achievements. This is important when machines are sold abroad or plants are constructed; *e.g.*, in under-developed countries.
4. When unemployment relief work is organized, it could be determined when it would be an economic proposition to pay subsidies to the unemployed working at a low rate of efficiency rather than to keep the relief work going.
5. When more information is acquired on a reasonable work achievement, "slow-downs" would no longer be effective. On the contrary, information on this point would raise work efficiency as a result of cooperation by both parties.
6. For similar reasons, those really willing to work would achieve good results, which would provide an incentive to further efforts.
7. Wisely organized, the efforts towards a universal work achievement unit and related activity would raise the living standard and public health in the whole world, since the limits of work achievements under different conditions would not be surpassed.

Possible Disadvantages

The opinion may be advanced that certain consequences would be partly unfavorable. For example:

1. Management and labor and their organizations could no longer make use of the law of supply and demand to the same extent as before to secure benefits.
2. The achievements of the partially disabled and those unwilling to work would distinguish themselves more clearly from others, which might result in psychological disorder in certain cases.
3. The "ceilings" agreed on by the workers or imposed by others for their work achievements would be more difficult to realize.
4. The different working facilities in various countries would emerge more distinctly, which might result in emigration or in various demands for subsidies.
5. The demands for settlement of questons of pensions, sick pay and unemployment benefits would gain in emphasis. Social expenses would rise.

Conclusion

However, the advantages to be had are considerably greater than the disadvantages, and the creation of a universally applicable unit of work achievement is at the moment a matter of primary importance. ■

Management Bookshelf

Review of:

PERSONNEL, THE HUMAN PROBLEMS OF MANAGEMENT, George Strauss and Leonard Sayles, Prentice-Hall, New York, 1960.

An increasing number of first rate social scientists have been harvesting in the management vineyard. Two successful books out of this harvest are the very readable and scholarly work of Strauss and Sayles and the book by Henry H. Albers, "Organized Executive Action." Strauss and Sayles address their study to those who desire to equip themselves for dealing effectively with the human problems of the business organization. To achieve this they have brought together an extensive body of practical illustrations and scientific study. As they have pointed out, "the manager needs analytical techniques that go beyond the transitory practices of specific companies at specific moments in their history." The authors have combined research from many sources to give illuminating and provocative challenges to the reader. And in addition they offer sound remedial measures to improve productivity and deal effectively with employee dissatisfactions.

One of the most striking portions of the book deals with the elements of effective supervision and offers much supporting evidence. The authors suggest seven characteristics of the effective manager. He is one who:

1. Delegates authority.
2. Makes definite assignments and supervises by results.
3. Minimizes detailed orders.
4. Uses low pressure.
5. Trains subordinates.
6. Does different work from that done by his subordinates.
7. Spends his time on longe-range rather than short-range problems.

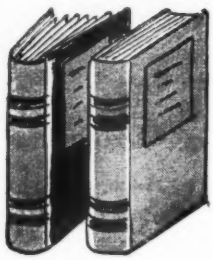
Strauss and Sayles then go on to clearly illustrate the application of these concepts to practical situations combined with supporting research.

While the book is strongly oriented toward the human aspects of management as implied in its title, they make it practical reading for the manager who would achieve production through the efforts of people. Not unexpectedly they suggest . . . "severe conflicts arise between the needs of individuals and the needs of the groups and organizations that make up society. As the administrator makes choices between organizational efficiency and the satisfaction of individual needs he is acting as a mediator in this inevitable, socially useful, divergence of interest." The reviewer has been sufficiently impressed with the approach of this book to recommend it as an original and comprehensive text for any good management training program.

H.A.S.

Review of

ORGANIZED EXECUTIVE ACTION, Henry A. Albers. John Wiley and Sons, N.Y.C., 1961.



Whereas Strauss and Sayles go into a detailed research of human problems and case studies primarily emphasizing the human aspect of management, Albers devotes his study to a general survey of the whole field of management with particular references to the processes of management. Both books draw extensively upon the inter-disciplinary fields of behavioral sciences. For that reason, both provide excellent research material for the well-informed manager. Albers is concerned with what he calls the basic tools of executive action — decision making, communications, and leadership. The book has four integrating themes — hierarchy, processes, prospective, and economy. Interestingly enough, it includes an analysis of electronic data processing systems as applied to management.

Early in the book the author weaves an interesting historical survey of the emergence of the organization of work as a management process. One of his most fascinating illustrations is a discussion of the Arsenal of Venice which in the year 1436 was one of the first attempts at the organization of men and materials to produce a product—in this case an armed vessel. It is absorbing to see the detailed way in which the arsenal was organized to produce ten galleys "fully armed between the hours of three and nine" through the systematic and organized, procedures and efforts of managers, foremen, carpenters, and workers.

Albers discusses in some detail executive development programs applying the interdisciplinary approach. Albers challenges executive leadership: "Management that has the inherent capacity to reconstruct itself in response to internal and external forces can successfully survive if it continues to make appropriate changes". He feels, however, that over a long period of time the system of self-generation can lead to difficulty especially where there is an inefficient structure combined with the vested interests of executives, all of which may inhibit adjustments. Organizations, he suggests, have to be revitalized by the dynamic forces of new leadership if they are to survive, but more than that, creative management suggests the development of executives within companies who have "ideas and ideals and the courage to implement them".

It is refreshing to hear someone call for ideas and courage in an industrial organization. Institutions in today's society, the school, industry, *etc.*, all have become stereotyped into the organization-man fixation. It is about time we begin to acknowledge the non-organization man as well.

H.A.S.

Review of

MANAGEMENT CONTROL SYSTEMS, editors Donald G. Malcolm and Alan J. Rowe, John Wiley & Sons, New York, 1960.

Twenty-two authors contributed to this symposium held at System Development Corporation. Their papers are recorded in seven groups; *viz.:*

Opportunity for Innovation in Management Controls

Concepts of Management Control—Present Practices

Impact of Computers on the Design of Management Controls

Examples of Automated Management Controls

New Approaches—Future Possibilities in Management Control and Information Systems

Research in Management Control System Design

Summary.

Many constructive applications are reported. Also, the prospects suggested for future uses are startling to contemplate. All readers interested in the field will profit from studying this composite report.

However, where the "management" part of our control systems is today is suggested by these two comments 1) "Very few people in business have had the opportunity to reflect on the way in which the accounting model developed, particularly on how an instrument well adapted to detect fraud and measure tax liability has gradually been used as a general-purpose information source. Having become accustomed to information presented in this form, business people have adapted their concepts and patterns of thought and communication to it rather than adapting the information to the job or person." 2) "Managers are often handicapped rather than helped by existing reporting and control systems. The interaction and relationship between different decisions is not brought out."

Along with these, goes the need for more rapid reporting. An author says, "One of the most costly elements in any company today is the time lag which exists in its management information and control systems."

In this same vein, several authors point out that we tend to use our newly-found electronic devices to increase the amount and flow of information.

Then we come to report format that is stressed in two quotes. 1) "Reporting systems . . . for the control and review of data-processing programs quite often are extremely cumbersome, complex, and difficult to comprehend by non-technical personnel." 2) "The integration and display of information is an area which requires a lot of work."

Going from the current handicaps to the "management control" phase, we find these comments: "Measurement is the crux of control, but . . . present-day control systems are based on ease of measurement rather than need." ". . . what is measurable, what is controllable, and what information is needed to make the kind of decisions that

More Bookshelf

will help shape and influence the future rather than to follow statistical projections of the past.

Several authors stress that what we need is to develop "analytical and evaluative tools" to translate data into usable form. One important example of "translate" is in making connections between business results and functional, departmental, and specialized efforts. In different words, how do we measure the effects of a department's actions on the achievement of company objectives?

The most striking element in these pages, as your reviewer reads them, is indicated by these quotations a) "The achievement of the basic goal, however, will be possible only after extensive research is conducted in the areas of identifying and understanding all factors which affect the operation of a business." and b) "In this study we are not trying just to simplify or improve our present information systems or to look for computer applications, but more basically, to try and obtain an understanding of the kinds of decisions that need to be made within the company . . ."

Thus, if we underscore "management control" in the title, it seems evident that this book should be required reading for managers. For managers cannot gain the main control advantages of these electronic devices until two missing types of yardsticks are developed. One is a set or sets of factors they think they need in order to make decisions more promptly and more correctly. The other is the whole group of measures that are required to shift from gauging staff operations in terms of *activities* to that of *results* accomplished for long-range profit improvement.

PHIL CARROLL

* * *

Professor James R. Bright, director of the Industrial Management Center, announces that three new courses will be offered this year in addition to the 8th Annual Material Handling Course. All the courses will be held at the Lake Placid Club, Essex County, N.Y., as follows: Mechanization Policy and Planning, June 11-16; Capital Expenditure Analysis, June 11-16; Material Handling, June 18-30; and Inventory Planning and Control, June 18-23.

These courses are claimed to combine advanced concepts, new theories, noteworthy organizational procedures, and practical problem-solving.

For folders describing the courses, write to Mr. Bright, in care of the center, 370 Concord Rd., Weston 93, Mass.

* * *

The Soviets employ over 2,000 full-time and 20,000 part-time workers who abstract and translate technical articles from the outside world and have them ready for Russian scientists about 4 to 6 months after initial publication. Best U.S. counterpart system has only 1,700 part-time workers, takes a year to prepare foreign articles for scientific study.

"Research in Government and Industry," by Gen. James M. Gavin, American Institute of Chemists, May 7, 1959.

Personnel Briefs—

William P. Layton

Robert H. Stice, jr.

New Chapter Service Director Appointment Announced

S.A.M. National President James E. Newsome recently announced the appointment of William P. Layton as chapter service director of the Society. Replacing Patrick J. Reddington who has taken a position with the Controller's Institute of America, Mr. Layton will give his major attention to serving chapters in the areas of membership and programs. He will also be responsible for inter-organizational relations as well as communications with the chapters and programs of any national conferences or workshops conducted by the Society.

Mr. Newsome pointed out that this appointment is a part of a concerted program to strengthen S.A.M.'s chapter assistance.

Before joining the S.A.M. staff, Mr. Layton was associated with the National Association of Credit Management as educational director. He served also as executive director of the NACM's graduate school of credit and financial management, with summer sessions at Dartmouth College and Stanford University, and as general manager of the Credit Research Foundation.

He was associated with the Georgia State College of Business Administration, Atlanta, Ga., for 10 years before joining the staff of the NACM.

A colonel in the Adjutant General's Dept. of the United States Army Reserves, he is active in the Kiwanis Club of N.Y.C., The Marble Collegiate Church, and the New York University Club. He has the bachelor of philosophy and the master of education degrees from Emory University and has done considerable work towards a doctor's degree at New York University.

He makes his home in N.Y.C. with his wife, the former Miss Mary Louise Farah of Rockhill, S.C.

'Advanced Management' Gets Ass't. Managing Editor

Robert H. Stice, jr., has recently joined the staff of ADVANCED MANAGEMENT as assistant managing editor, Walter Mitchell, jr., editor-in-chief, announced. Mr. Stice brings to bear nearly 10 years of experience in newspaper, TV, radio advertising, and quasi-governmental public relations work—both in the writing and production phases.

Most recently, he has served as assistant editor for *Book Production* magazine, published in N.Y.C., on which he handled feature writing, production, and photographic responsibilities.

Mr. Stice, who received a master's degree in communication and public policy from San Francisco State College in 1958, gives indication of a pronounced administrative bent. A native San Franciscan, he resides in N.Y.C. with his wife, Adeline, from San Francisco as well.

—C.W.H.

European Mgmt. Center to Open

The first management center in Europe has been established in Brussels and will open for operations Sept. 1, it was announced recently by Frederic E. Pamp, jr., president, International Management Assn. The IMA is the foreign arm of the American Management Assn.

The European center follows the successful operation of IMA's Management Center *do Brasil*, opened in Sao Paulo last July. Some 500 Brazilian executives have received training in Sao Paulo.

The Brussels center, located at *62 rue Royale* facing the *Parc de Bruxelles*, is being remodelled to provide fully-equipped training rooms for a capacity of 80 to 100 executives in simultaneous meetings. Booths, mi-

crophone, and amplifier equipment will be provided for simultaneous translation of the sessions in four languages: English, French, German, and Italian.

The general manager of the new center is Milton L. Rusk who for the past two years has been manager of the International Management Div., AMA. Mr. Rusk previously worked three years in France as a newspaperman and as an administrator for the Marshall Plan.

A small group of top European executives is being organized as an interim Planning Council for the European center. This group will meet in Brussels, May 1 with Don G. Mitchell, chairman of AMA and president, General Telephone and Electronics Corp., N.Y.C.; Lawrence A. Appley, president, American Management Assn., and Mr. Rusk, to set policies for the development of the center.

One of the first sessions to be held in the new center in October will be a special course for chief executive officers of European companies.

Advanced Management Course Now Holds Forth in 7 Cities

The Society for Advancement of Management reports that units of its Advanced Management Course are currently being conducted in N.Y.C., Philadelphia, Worcester, Mass.; Cleveland, Washington, Binghamton, N.Y.; and Greenville, S.C. Approximately 100 executives from middle and upper management are enrolled in these units which meet every other week for 17 sessions.

Participants represent a wide range of positions in business, professional and government fields, including the following:

Director of International Operations
Assistant Director of Engineering
Treasurer
Vice President
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In each unit the leader, called an administrator, supervises the three-hour sessions of "mind-stretching" discussion based on extensive reading assignments and a pooling of experience. Administrators are drawn from universities and the management consulting field, as well as from business and industry. Units of the course are sponsored by local chapters of S.A.M. and already additional chapters are expressing interest in sponsoring units for 1961-'62.

Big Business Executives Study Way To Aid Managers of Small Business

Top management executives of 32 large corporations met in St. Joseph, Michigan, recently in an exploratory conference on management aid to small business and underlined the importance of such assistance by voting unanimously to meet semi-annually and set up a committee to establish a permanent organization.

Representatives of such companies as DuPont, General Electric, General Motors, RCA, Firestone Tire & Rubber, Pillsbury, Dun & Bradstreet, International Harvester, the Bank of America, and others, gathered at the administrative center of the Whirlpool Corporation for a day's discussion of individual programs to help small businesses operate profitably and securely and to explore the possible greater impact and efficiency of combined effort.

In welcoming delegates, L. T. White, vice-president of Cities Service Petroleum, Inc., and SAM advisor, declared that 1,000 small firms go out of business each day. There are, he said, some 4,000,000 small businesses in America and one out of every six people who work for a living is head of his own business enterprise. A new and important element in business survival, he declared, is the creative instruction of others in good management.

Host R. E. Brooker, president of Whirlpool Corp., emphasized the growing complexity of the American economy and the fact that big business is dependent for its own survival upon the stability and profitability of smaller firms that provide it with materials, use its products, or distribute its goods.

√-List For Future Events

April 14-15, 1961	3d Annual New England-Empire State Regional Univ. Chapters Conference at Seton Hall University, So. Orange, N. J. Hon. James P. Mitchell, Keynoter (Apr. 14): "Automation—General Views of Mgmt., Labor, and Public"
April 24-26, 1961	Special Marketing Conference on pricing problems under current marketing conditions. Roosevelt Hotel, New York
May 2-3-4, 1961	17th Annual Conference, American Society of Training Directors. Bellevue-Stratford Hotel, Philadelphia
	13th Annual Conference of the American Society for Personnel Administration. Minneapolis.
May 7-11, 1961	42nd International Conference and International Exposition of the National Office Management Association. Kiel Auditorium, St. Louis, Missouri
June 23, 1961	S.A.M. Board of Directors Meeting, Indianapolis
June 26-29, 1961	6th Annual Conference of the National Council for Small Business Management Development. University of Delaware, Newark, Delaware
August 20-23, 1961	1st International Congress on Ergonomics, Federation of Swedish Industries. Stockholm
August 23-26, 1961	8th Annual International Meeting of The Institute of Management Sciences (TIMS) Brussels, Belgium
September, 1961	First Indo-Pacific Management Conference, Manila (Philippines)
Sept. 10-30, 1961	S.A.M. International Management Seminar abroad —Holland, West Germany, Switzerland, Italy, France, Belgium.
Sept. 18-23, 1961	6th Annual Midwest Work Course on Plant Layout & Facilities Planning. University of Kansas. Town House Hotel, Kansas City, Kans.

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University Division News

by Harold Fischer, president

"Give and It Will Be Given Unto You" is the very appropriate title of an article by Dr. James J. Cribbin, faculty advisor of the N.Y.U.-Day Div. Chapter, in a recent issue of their newsletter, the *Highlighter*. Dr. Cribbin says:

"Why do students join an organization like S.A.M.? . . . In any organization, there are generally at least two types of people: the doers and the talkers. . . . During the brief time that it has been my privilege and pleasure to be associated with S.A.M., I have been more than surprised by the conscientiousness and enterprise of the officers and members. With a surprising intensity, they have given of their talents, time, and energy to make S.A.M.'s year profitable and successful for all. Their enthusiasm is contagious, their resourcefulness at times surprising; their determination to do a good job refreshing. The ability of the officers of S.A.M. to plan, organize, and carry through a rather complex and crowded program of activities is a tribute to their maturity.

Success Is Never a Gift—It Is Always an Achievement At the end of the year, will you be a name on a membership roll or one of those who enjoys the satisfaction of having done something for your organization and yourself? *Are You a Talker or a Doer?*"

* * *

Pat Gallaher, president of the Purdue University chapter, writes in their newsletter, the *Balance Sheet:*

* * *

"This year's program will present topics that will be of interest to us all. The planned program will bring us into contact with men from many fields—union, political, industrial, and financial. These men will be leaders in their fields and their knowledge will be current and presented to us first hand. In my opinion, it is an important part of our college education to meet with such men and to listen to what they have to say, for the information and advice that they pass on to us should help us broaden our knowledge and stimulate interest in their respective fields."

You're on target, Pat. Georgia Tech feels much the same way, as was evident from an article in the *North Avenue Journal:*

"Advancement within a company is always contingent on your abilities. Remember, *a job has no future — it is the man who has the future.* One can advance from any position in the company. It is proven ability that counts."

* * *

Congratulations to the LaSalle College Evening Div. Chapter, who have for the fourth consecutive year won the Philadelphia Senior Chapter Performance Award. In the LaSalle newsletter, *S.A.M. Evening Manager,* this thought was emphasized:

"Did you ever stop to evaluate the elements that make a particular local association stand out? One feature predominates: great emphasis on an active membership. In every successful chapter, you will find the members actively participate in all of the affairs of the chapter, attend meetings regularly and take pride in their group's activities."

* * *

James P. Mitchell to Speak At Automation Conference

Former Secy. of Labor James P. Mitchell will give the keynote address at the Third Annual New England-Empire State Regional University Chapters Management Conference, will be sponsored by the Seton Hall University Chapter on Apr. 14-15, at South Orange, N. J. Richard F. Crosby, president, and Samuel Bauman, conference chairman, arranged an ambitious and interesting program on the theme, "Automation—Future—You". Representation of 36 University Chapters in New England, N. Y., N. J., and Pa. will be invited to conduct the workshops which will follow the general sessions and main addresses concerning how labor, management and the public look at automation.

Automation exhibits and a tour of an automated plant were included in the conference. Each delegate to the conference will receive a package of assorted materials on the subject of automation. Leaders in labor, industry, and the government will participate.

We pay tribute to Professor Ralph A. Marini, President Daniel J. Pesaresi, and the members of the new University Chapter at Saint Joseph's College, Rensselaer, Ind., for their membership achievement. Organized just a few months ago, the chapter had more than 120 members by March 10. They have the spirit, the organization, and the leadership. They are going places because they are "learning by doing".

In the new membership brochure, recently brought out by the Senior Chapter Div., the following is stressed:

"*Help future managers*—in many chapters, top-level executives are helping to guide and develop the S.A.M. Student Chapters in colleges and universities of the area. Education and business enjoy mutual benefits from this contact. The student chapter, and its alma mater's faculty, benefit from the practical thinking and the contact with live management problems."

* * *

Mr. William Divine, president of the Washington Senior Chapter, is quoted in the *Executive,* newsletter of the University of Maryland Chapter:

"I would like to emphasize again that the full range of activities of the Senior Chapter are available to members of the University of Maryland Chapter. This not only includes our dinner meetings at the Lafayette Hotel (student rate $3), but other activities such as financial management roundtable, the automatic data processing management roundtable, the new frontiers of management roundtable, the computer visit series and various special events. We welcome your attendance at all these sessions. I hope that the University of Maryland S.A.M. members will take advantage of this opportunity to participate in our program and perhaps benefit from a free exchange of ideas with our members."

Norman Draper, student coordinator of the Washington Senior Chapter, and his committee certainly are doing everything possible to stimulate active participation of student chapters of the Washington area in the Senior chapter activities.

* * *

Mr. Robert Boden, the very active student coordinator for the Chicago Senior Chapter, reports the following:

"The Chicago Senior Chapter is inviting one member from each of the University Student Chapters to attend the General Management Div. dinner meetings as their guest. The cost of the dinners for these guests is being assumed by four or five of the Senior Chapter members, apart from Senior Chapter funds. Also, one Chapter is invited to send a group of students from their group to a particular meeting and this is then featured as "their night". This seems to be stimulating quite a bit of interest among the local Chapters. The university chapters under the stewardship of the Chicago Senior Chapter are doing very well this year. The evening division of the Loyola Student Chapter is being formed. The membership of the day division is increased over last year at this time. In addition, Roosevelt University is sponsoring a one-day seminar next week and its chapter activities have picked up noticeably. The same is true at DePaul University and the University of Illinois."

Nice going, Bob! This is another area in which the close liaison between Senior and University Chapters is producing very good dividends for all.

* * *

Bryn E. Eynon, University Chapter Coordinator of the Cincinnati Senior Chapter, said recently:

"We are proud of our University Chapters and they are all doing a good job this year."

The Cincinnati Chapter continues to provide direction and inspiration. At their annual university night meeting, that was attended by over 100 students, S.A.M. Awards were presented to the senior student of each chapter for his or her outstanding contribution to the school and to the Student Chapter. Congratulations to the recipients: Aija Zarins, University of Cincinnati; Garry Ahlrichs, Villa Madonna College; Mavis Guffey, University of Kentucky; Jack Faulkner, Miami University; Robert J. Kneuven, Xavier University.

* * *

The Birmingham Senior Chapter honored members and faculty of the Auburn Student Chapter at a banquet in recognition of their recent Performance Award.

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More Univ. Div. News

* * *

The St. Norbert College Chapter pays tribute to the Fox Valley Senior Chapter for their help in making a travel fund possible for the chapter so that it could be represented in N.Y.C. to receive its Performance Award last fall.

* * *

The Auburn University Chapter has introduced a new angle. They have the WIMS Club (wives of industrial management students). All wives of student chapter members are eligible. They get together for social and educational activities and the organization has promoted a real feeling of fellowship. At the end of each quarter, a degree is presented to each active WIM whose husband is graduating. The degree, P.H.T. (pushing husband through) is in memory of her many evenings spent with hubby burning the midnight oil and her discriminating penny-pinching economy through the lean years. Each diploma is signed by "the-most-grateful" husband, "anxious-to-graduate" president, and WIMS Advisor, Mrs. William E. Lane.

* * *

The University of Pittsburgh Chapter's "S.A.M. Senior Brochure of 1961" is the first that has reached us this year. Again the chapter has done an outstanding job in bringing significant data to the attention of more than 200 companies on graduating members of the chapter.

The S.A.M. chapter at Mississippi State University has provided a real service to the institution by publishing and distributing a brochure entitled, "Management at Mississippi State University". This attractive pamphlet gives businessmen and others a better knowledge of what a management graduate is and what he is qualified for.

* * *

The Illinois Institute of Technology Chapter, at the bottom of their stationery, uses "Dedicated to a Lifetime of Learning". Yes, it certainly is evident in many ways that The Society for Advancement of Management through the University Chapters and the Senior Division, is living up to that motto.

The Ohio University Chapter sponsored its Fourth Annual Regional Conference on March 24. The conference topic was "The Human Side of Management". Four workshops dealt with "Importance of Human Relations", "What are Human Relations", "What is a Manager", and "A Manager Develops Himself". George Williams, president of the chapter, Ken Romig and Dale Welks, Co-chairman for the conference, and Professor Ralph Smith, faculty advisor, put on a meaningful conference.

These conferences reveal what can be done by students and our University Chapters in planning, organizing, and conducting a successful and well-integrated program on a Regional basis. They, too, are "learning by doing".

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